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09/749,825	12/28/2000	John Alson Hicks III	BS00-216	5201

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EXAMINER	
SALTARELLI, DOMINIC D	
ART UNIT	PAPER NUMBER
2623	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/749,825	HICKS ET AL.	
	Examiner	Art Unit	
	DOMINIC D. SALTARELLI	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed February 15, 2008 regarding the 35 USC 112 first paragraph rejections of claims 1 and 30 have been fully considered but they are not persuasive. In spite of the amendments and assertion to the contrary, the claims still contain limitations which are not supported by the specification.

Claim 1 first describes a system wherein the tuners and demodulators are coupled to a different switch port of the data switch to send the information signals to the data switch (claim 1, lines 15-19), but then states the tuners and demodulators share the system bus to communicate information to a third switch port of the data switch (claim 1, lines 20-23), mixing mutually distinct embodiments from the specification (see page 6 line 21 - page 7 line 2 and page 13, lines 4-20, which teaches using distinct dedicated ports and a shared port are two different embodiments of the invention). The 112 first paragraph rejection of claim 1 has been updated to reflect this feature of the amendment.

Claim 30 describes a system the tuners and demodulators first output signals, which are carried over a shared system bus to a data switch through a shared switch port (claim 30, lines 12-19), but then states the tuners and demodulators are adapted to receive these same output signals via said system bus, a processing loop found nowhere in the specification. The 112 first paragraph rejection of claim 30 has been updated to reflect this feature of the amendment.

Regarding the limitations found in claim 1, the examiner is interpreting the third switch port to be one of the different switch ports claimed, which is shared by the tuners and demodulators over time, as the tuners and demodulators are flexibly reassigned to different switch ports over time.

Regarding claim 30, the examiner is interpreting the system bus limitation sufficiently broadly so as to include the direct link between the tuners and their corresponding demodulators.

2. Applicant's arguments filed February 15, 2008 regarding the 35 USC 103(a) rejections of claims 1 and 4-47 have been fully considered but they are not persuasive.

Applicant's sole argument rests upon the specification clearly teaching an architecture with 3 distinct buses for transport of information and the Humpleman disclosure being fundamentally incompatible with any modification to introduce such an architecture.

In response, the examiner must note that there is no mention of the Eames reference in applicant's rebuttal, whereas it is the Eames reference which the examiner introduced to create the *prima facie* case for obviousness with regards to the bus architecture. As stated previously:

"It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Humpleman to include plural interconnected buses as taught by Eames. While Humpleman clearly inherently includes a bus to transport data from the network interface units to the hub, Eames is evidence that it is obvious to

designate plural interconnected buses for the transport of data. Whether the buses in question are physically distinct and indirectly coupled or only separate in the abstract sense cannot be determined, as the claimed media bus, system data bus, and network bus are disclosed in a sufficiently vague manner to include both possibilities (see fig. 6 of the originally filed disclosure). Either case is obvious and well known in view of the prior art, as the sole purpose of a bus is simply to transport data between circuits."

The specification designates 3 buses by name, but there is no clear support for an architecture that clearly defines 3 distinct buses in the manner being argued by the applicant, as the 3 named buses are all connected, thus the architecture is that of a single bus with 3 named sections. Further, the examiner introduced Eames to show that such distinctions are trivial nonetheless, as bus architecture, either shared or distinct, are all obvious in view of the prior art.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claim 1 first describes a system wherein the tuners and demodulators are coupled to a different switch port of the data switch to send the information signals to the data switch (claim 1, lines 15-19), but then states the tuners and demodulators share the system bus to communicate information to a third switch port of the data switch (claim 1, lines 20-23), mixing mutually distinct embodiments from the specification (see page 6 line 21 - page 7 line 2).

Claim 30 describes a system the tuners and demodulators first output signals, which are carried over a shared system bus to a data switch through a shared switch port (claim 30, lines 12-19), but then states the tuners and demodulators are adapted to receive these same output signals via said system bus (claim 30, lines 20-23), a processing loop found nowhere in the specification.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 5, 6, 15-20, 22-25, 27-30, 32-34, 36-38, 40, 41, and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman (6,005,861, of record) in view of Eames et al. (6,493,875, listed on the IDS filed 7/30/07) [Eames] and Russo (6,732,366, of record).

Regarding claims 1, 30, and 36, Humpleman discloses a system for providing digital entertainment data, the system comprising:

multiple tuners and demodulators sending information signals to a media bus (network interface units 32, col. 9, lines 44-64, outputting to internal network 34, shown in fig. 1);

a data switch connected to the bus, the data switch receiving the information signals and sending the information signals to a plurality of switch ports (switch hub 38, shown in fig. 2, which comprises crossbar switch 44 which provides the switch ports that connect the devices, col. 5, lines 26-44);

each of the multiple tuners and demultiplexers selecting a respective content item from a plurality of content items (the tuning and demultiplexing operation which selects a particular program from a received stream, col. 9, lines 44-64)

the tuners and demodulators coupled the data switch via the bus sending the information signals to another switch port of the plurality of switch ports of the data switch (the port connections are established based on solely on source/destination pairs, col. 5, lines 26-44); and

the bus is coupled to a third switch port of the data switch, the bus being shared amongst the multiple tuners and demodulators, wherein the multiple tuners and demodulators each share the system data bus to communication information to the third switch port (again, the port connections are established based on source/destination pairs, col. 5, lines 26-44, and are dynamically

reallocated based on how the system is used, for example, if a user watching television changed channels such that the input to the TV switched from a first source to a second source, the sources [tuners] would share that port connecting them to the TV).

Humpleman fails to disclose a system data bus connected to the media bus and receiving the information signals, a network bus connected to the system data bus and receiving the information signals, and a mass storage device connected to the system data bus and storing the information signals.

In an analogous art, Eames discloses a system for providing digital entertainment data (fig. 3), and teaches that it is well known to utilize several interconnected buses to route information within a gateway (col. 5, lines 26-36). Designation of the buses within the system is a largely arbitrary practice, since interconnected buses can be considered a single bus or a collection of buses equally well. Eames simply names buses according to the type of data which they transport.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Humpleman to include plural interconnected buses as taught by Eames. While Humpleman clearly inherently includes a bus to transport data from the network interface units to the hub, Eames is evidence that it is obvious to designate plural interconnected buses for the transport of data. Whether the buses in question are physically distinct and indirectly coupled or only separate in the abstract sense cannot be determined,

as the claimed media bus, system data bus, and network bus are disclosed in a sufficiently vague manner to include both possibilities (see fig. 6 of the originally filed disclosure). Either case is obvious and well known in view of the prior art, as the sole purpose of a bus is simply to transport data between circuits.

Humpleman and Eames fail to disclose a mass storage device coupled to the system data bus and storing the information signals.

In an analogous art, Russo discloses a system for providing digital entertainment data (fig. 2) including a mass storage device coupled to a system data bus and storing information signals (fig. 2, storage 110, col. 7, lines 36-50), providing the benefit of stored programming for later playback (col. 3, lines 9-21).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Humpleman and Eames to include a mass storage device coupled to the system data bus and storing the information signals, as taught by Russo, for the benefit of stored programming for later playback.

Regarding claims 5, 6, 40, and 41, Humpleman, Eames, and Russo disclose the system and method of claims 1 and 36, wherein the mass storage device stores an item identifier corresponding to each stored content item, the item identifier having a value that indicates the content item has been played (for pay-per-play usage, Russo, col. 5, lines 12-21), another value indicated the content items has been purchased (for open ended usage, Russo, col. 5, lines

45-58), a third value indicating the content item has been licensed (available for viewing, Russo, col. 5 line 59 - col. 6 line 9), a cost of playback for each content item (to debit the account for pay-per-play usage, Russo, col. 10, lines 33-34) and a second cost of purchase for each content item (to debit the account for open ended usage, Russo, col. 10, lines 33-34). The examiner recognizes that the pay-per-play and open ended, or 'rental' paradigm, uses are disclosed as alternative embodiments in Russo, however, they are not mutually exclusive and therefore both included when Humpleman and Eames are modified in view of Russo's disclosure to include the mass storage device.

Regarding claim 15, Humpleman, Eames, and Russo disclose the system of claim 1, wherein one of the multiple tuners selects an information channel of a plurality of information channels by received a plurality of transmission signals and outputting a transmission signal of the plurality of transmission signals (Humpleman, col. 7, lines 24-65 and col. 9, lines 44-64).

Regarding claim 16, Humpleman, Eames, and Russo disclose the system of claim 1, wherein the mass storage device receives and stores the content item (Russo, col. 4, lines 33-38).

Regarding claim 17, Humpleman, Eames, and Russo disclose the system of claim 1, wherein the data switch receive an information signal, the data switch

sends the information signal to the mass storage device, and the mass storage device stores the information signal (Russo, col. 7, lines 36-46).

Regarding claims 18,19, and 37, Humpleman, Eames, and Russo disclose the system and method of claims 1 and 36, wherein an analog-to-digital converter receives an information signal, the analog-to-digital converter outputs a digital information signal, the digital information signal based on the information signal, and the mass storage device stores the digital information signal (Russo, col. 8, lines 22-26), wherein the digital information signal is a Motion Picture Expert Group 2 (MPEG-2) encoded digital information signal (Russo, col. 8, lines 7-14, where MPEG-2 is the 'standard technique, such as MPEG' mentioned, given Russo's filing date of Jan. 31, 2000, at which time MPEG-2 had replaced the original MPEG as a compression standard).

Regarding claim 20, Humpleman, Eames, and Russo disclose the system of claim 1, wherein an analog-to-digital converter receives an information signal, the analog-to-digital converter outputs a digital information signal, the digital information signal based on the information signal (Russo, col. 8, lines 22-26), encryption logic receives the digital information signal, the encryption logic output an encrypted digital information signal (Humpleman teaches the network interface unit also encrypts signals that require security, col. 9, lines 44-64), and

the mass storage device stores the encrypted digital information signal (Russo, col. 4, lines 33-38).

Regarding claim 21, Humpleman, Eames, and Russo disclose the system of claim 8, further comprising a second multimedia input, the second multimedia input coupled to a switch port of the data switch, the second multimedia input to receive a multimedia signal, wherein the data switch is to receive the multimedia signal (simply another NIU, Humpleman, col. 3, lines 21-35).

Regarding claims 22, 27, 32, 33, and 44, Humpleman, Eames, and Russo disclose the system and method of claims 1, 30, and 36, further comprising a plurality of broadband data communication links, each broadband data communication link coupled to a respective switch port of the data switch (the outputs of the crossbar switch shown in fig. 3 of Humpleman, see col. 3, lines 49-55, wherein the switch ports are a plurality of 100Base-T Ethernet switch ports, col. 3, lines 49-55, making the switch an Ethernet switch), and a plurality of digital set top boxes, each digital set top box coupled to a respective broadband data communication link (Humpleman, col. 4 line 66 - col. 5 line 19).

Regarding claims 23 and 46, Humpleman, Eames, and Russo disclose the system and method of claims 22 and 36, wherein the broadband data communication links are category 5 cables (Humpleman, col. 4, lines 48-51).

Regarding claims 24 and 28, Humpleman, Eames, and Russo disclose the system of claim 22, wherein the digital set top boxes include a digital data interface, the digital data interface to communicate with the data switch (Humpleman, transceiver 92, see fig. 7 and col. 9, lines 15-19, which is an Ethernet interface for communicating over the 100Base-T network, col. 3, lines 49-55).

Regarding claims 25 and 34, Humpleman, Eames, and Russo disclose the system of claims 22 and 32, further comprising a lower bandwidth communication interface, the lower bandwidth communication interface coupled to yet another switch port of the data switch (NIUs attached to phone lines for receiving ISDN or ADSL signals, Humpleman, col. 3, lines 21-35).

Regarding claims 29 and 45, Humpleman, Eames, and Russo disclose the system and method of claims 1 and 36, wherein the data switch is a router (col. 6, lines 45-49).

Regarding claim 38, Humpleman, Eames, and Russo disclose the method of claim 36, further comprising selecting a second transmission signal of the plurality of transmission signals, demodulating the second transmission signal to isolate a second information signal, sending the second information signal over

the media bus connected to the system data bus to the digital data switch, and sending the second information signal to a second broadband communications link coupled to the digital data switch (another NIU accessing content, but simply tuning to a different channel, Humpleman, col. 3, lines 21-35 and col. 7, lines 24-34).

7. Claims 4 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman, Eames, and Russo as applied to claims 1 and 36 above, and further in view of Meyer et al. (4,809,069, of record) [Meyer].

Regarding claims 4 and 39, Humpleman, Eames, and Russo disclose the system and method of claims 1 and 36, but fail to disclose an overlay processor connected between the system data bus and the media bus, the overlay processor being coupled to a fourth port of the data switch, the overlay processor superimposing multiple information signals onto a first information signal.

In an analogous art, Meyer discloses a system for providing digital entertainment data that includes an overlay processor superimposing multiple information signals onto a first information signal (fig. 1a, PIP processor 50, col. 1, lines 19-27), providing the benefit of allowing a user to view several sources of video on a screen simultaneously.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system and method disclosed by Humpleman, Eams, and Russo to include an overlay processor superimposing multiple information

signals onto a first information signal, as taught by Meyer, for the benefit of allowing a user to view several sources of video on a screen simultaneously. The location of this processor is between the system bus and the media bus, as the multiple sources of information signals originates from the media bus (as this is where the output of the NIUs is first available), and are output to the system bus for transport onwards to the data switch, the overlay processor being coupled to a fourth port of the data switch for providing it's output to a requesting user device.

8. Claims 7 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman, Eames, and Russo as applied to claims 1 and 36 above, and further in view of Zhu et al. (5,768,527, of record) [Zhu].

Regarding claims 7 and 42, Humpleman, Eames, and Russo disclose the system and method of claims 1 and 36, wherein a broadband data port couples to the data switch to a receive a content item from a broadband data service provider (Humpleman, col. 3, lines 21-35), but fail to disclose the content item is downloaded and stored on the mass storage device at a data rate that is less than a playback rate in bytes per second, and the system monitoring when a remaining amount of time required to complete the download is less than a playback time of the content item, such that the system may indicate that the content item is available for playback.

In an analogous art, Zhu teaches a system for providing digital entertainment data (fig. 5, col. 10, lines 17-38), wherein content items are downloaded and stored at a data rate that is less than a playback rate in bytes per second (the rate scaler reduces the download rate to a value less than the original playback rate, from R_i to R'_i to accommodate for the limited bandwidth that has been determined to be available for transmitting content), and the system monitoring when a remaining amount of time required to complete the download is less than a playback time of the content item, such that the system may indicate that the content item is available for playback (there is an inevitable delay involved where an amount of data must first be buffered such that the user will not experience interruptions in playback while the rest of the content is downloaded at the slower than playback rate, col. 4, lines 4-14 and 42-48). This provides the benefit of allowing a viewer to receive and playback content items over low bandwidth connections (col. 8, lines 25-40) without having to wait for the entire file to be downloaded first (col. 4, lines 42-48).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system and method disclosed by Humpleman, Eames, and Russo to include the content item is downloaded and stored [on the mass storage device] at a data rate that is less than a playback rate in bytes per second, and the system monitoring when a remaining amount of time required to complete the download is less than a playback time of the content item, such that the system may indicate that the content item is available for playback, as taught

by Zhu, for the benefit of allowing a viewer to receive and playback content items over low bandwidth connections without having to wait for the entire file to be downloaded first.

9. Claims 8-14, 21, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman, Eames, and Russo as applied to claims 1 and 36 above, and further in view of Tsukagoshi (6,104,861, of record) and Halliwell et al. (5,473,772, of record) [Halliwell].

Regarding claims 8 and 43, Humpleman, Eames, and Russo disclose the system and method of claim 1 and 36, wherein a broadband data port couples to the data switch to a receive a content item from a broadband data service provider (Humpleman, col. 3, lines 21-35), the content item communicated from the data switch for storage at the mass storage device (Russo, fig. 2, storage 110), but fail to disclose the content item comprises a content item storage position identifier specifying a logical storage position in the mass storage device, and when new content items are downloaded and stored, a new content item storage position identifier is also downloaded for the content item already stored on the mass storage device.

In an analogous art, Tsukagoshi teaches a system for providing digital entertainment data comprising generating content item storage position identifiers specifying a logical storage position in a mass storage device which are downloaded to the storage device along with the content (the data stream

addresses regarding their position on the disk, col. 14 line 45 - col. 15 line 23), providing the benefit of indexed content which is easily searchable by a user (col. 15, lines 24-45).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system and method disclosed by Humpleman, Eames, and Russo to include generating content item storage position identifiers specifying a logical storage position in a mass storage device which are downloaded to the storage device along with the content (the data stream addresses regarding their position on the disk, as taught by Tsukagoshi, providing the benefit of indexed content which is easily searchable by a user.

Humpleman, Eames, Russo, and Tsukagoshi fail to disclose when new content items are downloaded and stored, a new content item storage position identifier is also downloaded for the content item already stored on the mass storage device.

In an analogous art, Halliwell discloses a system for providing digital data comprising a mass storage device, wherein new content item storage position identifier are downloaded for content item already stored on the mass storage device when new content items are downloaded (the new position identifier is a delete command to remove the old content item to make room for the new content items, col. 7, lines 43-52).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system and method disclosed by Humpleman, Eames, Russo,

and Tsukagoshi to include a new content item storage position identifier is also downloaded for the content item already stored on the mass storage device, as taught by Halliwell, for the benefit of improved automatic maintenance of the limited amounted of storage space available on a mass storage device, automatically deleting old content items when necessary to make room for the new content items.

Regarding claim 9, Humpleman, Eames, Russo, Tsukagoshi, and Halliwell disclose the system of claim 8, further comprising a first multimedia input, the first multimedia input coupled to the multiple tuners, wherein the first multimedia input is to receive a plurality of transmission signals (Humpleman, col. 3, lines 36-43, wherein the number of NIUs [the tuners] is determined by the number of streams that are simultaneously required from the available sources, wherein the multimedia input is a multiplex of broadcast signals carried by a coaxial cable, col. 3, lines 21-35).

Regarding claims 10-14, Humpleman, Eames, Russo, Tsukagoshi, and Halliwell disclose the system of claim 9, wherein the plurality of transmission signals include a plurality of television program signals (digital or mixed analog/digital broadcast signals), an audio signal (compressed audio), a data signal (Internet data), are received from a cable headend or direct broadcast satellite (cable provider or digital satellite service), and are frequency divided

multplex transmission signals (as is conventional for cable and satellite television broadcast services, Humpleman, col. 3, lines 21-35).

10. Claims 26, 35, and 47 rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman, Eames, and Russo as applied to claims 25, 34, and 44 above, and further in view of Stewart et al. (6,483,902, of record) [Stewart].

Regarding claims 26, 35, and 47, Humpleman, Eames, and Russo disclose the system and method of claims 25, 34, and 44, but fail to disclose the lower bandwidth communication interface is a Home Phoneline Networking Alliance 2.0 (HomePNA 2.0) interface.

In an analogous art, Stewart teaches that it is well known to use the HomePNA 2.0 interface for lower bandwidth telephone line communications over existing telephone lines (col. 24, lines 18-23), as the HomePNA 2.0 interface was designed exclusively for increasing the bandwidth available over older, lower category wiring.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Humpleman, Eames, and Russo to include the lower bandwidth communication interface is a HomePNA 2.0 interface, as taught by Stewart, as the HomePNA 2.0 interface is designed expressly for increasing the bandwidth capabilities of older, pre-existing wiring.

11. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman, Eames, and Russo as applied to claim 30 above, and further in view of Ludtke (6,154,206, of record).

Regarding claim 31, Humpleman, Eames, and Russo disclose the system of claim 30, wherein decryption logic is coupled to the demodulators, the decryption logic decrypting the first encrypted information signal (Humpleman, col. 7, lines 55-65, decryption is also performed by the NIUs), the information signal being sent to the data switch, and the mass storage device storing the information signal (Russo, col. 8, lines 22-26), but fail to disclose encryption logic coupled to the decryption logic wherein the content item is a first encrypted information signal, the encryption logic encrypting the decrypted first information signal to generate a second encrypted information signal.

In an analogous art, Ludtke discloses that it is well known in the digital broadcasting art to re-encrypt content after it has been decrypted prior to distribution over a home network to prevent illicit copying of the content (col. 10, lines 28-48).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Humpleman, Eames, and Russo to include encryption logic coupled to the decryption logic wherein the content item is a first encrypted information signal, the encryption logic encrypting the decrypted first information signal to generate a second encrypted information signal, as taught

by Ludtke, for the benefit of prevent illicit copying of content over a users home network.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOMINIC D. SALTARELLI whose telephone number is (571)272-7302. The examiner can normally be reached on Monday - Friday 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dominic D Saltarelli/
Examiner, Art Unit 2623

/John W. Miller/
Supervisory Patent Examiner, Art Unit 2623